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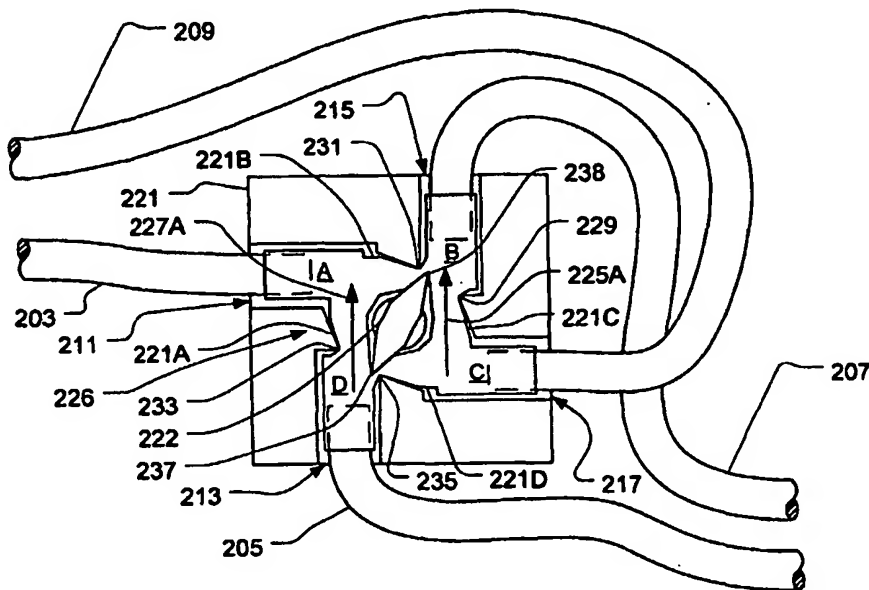
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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: IMPROVED METHODS AND APPARATUS FOR LEAK DETECTION IN BLOOD PROCESSING SYSTEMS



(57) Abstract: A blood processing system includes a flow reversing device with at least an air sensor in the venous line located near the patient. During treatment, blood flow is reversed to cause air to infiltrate the blood lines if any disconnections or breaks in the blood line are present. One means for placing the sensor close to the patient is to provide the flow switching device and sensors in a small lightweight module that can be located close the treatment machine. Another is to provide a module with just the sensors near the access.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/36933

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61M 37-00, A61M 1/00
US CL : 604/6.1, 6.01, 4.01, 34, 210/424, 137/625.43

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : Please See Continuation Sheet

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST BRS: valve, ring, toroidal, actuator

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| Y | US 3,744,524A (BLAU) 10 July 1973 (10.07.1973), entire document. | 1-15 |
| Y | US 5,687,764 A (TANAKA et al) 18 November 1997 (18.11.1997), entire document. | 1-15 |
| Y | US 6,308,737 B1 (KRITIVISKI et al) 30 October 2001 (30.10.2001), entire document. | 1-15 |

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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MONICA A. GRAVES

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Continuation of B. FIELDS SEARCHED Item 1:

604/6.1,6.01,4.01,34, 210/424, 137/625.43, 210/93,118,137,141,144,117,124,129,133,424, 137/625.14,625.11,625.42,625.43,597